

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-CE-24-AD; Amendment 39-13171; AD 2003-11-12]**

**RIN 2120-AA64**

#### **Airworthiness Directives; MORAVAN a.s. Model Z-242L Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** This document supersedes Airworthiness Directive (AD) 2003-03-13, which currently establishes a technical service life for MORAVAN a.s. (Moravan) Model Z-242L airplanes by restricting Acrobatic and Utility category operations and requiring replacement of the wings after a certain operational time. AD 2003-03-13 resulted from mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for the Czech Republic. The restrictions required by AD 2003-03-13 only take account for the aerobatic load spectrum and do not account for the aerobatic frequency. The restrictions also address the life limit of the wings when they should address the life limit of the entire airframe (life limit of the airplane). Although the aerobatic frequency will extend the operational times, it more importantly will ensure that all airplanes (even those that have not reached the operational limits) are not subject to fatigue cracking caused by exceeding the aerobatic frequency. This AD will maintain the restrictions of AD 2003-03-13, but will incorporate the aerobatic frequency and life limit the airplane instead of just the wings. The actions specified by this AD are intended to prevent structural failure of the wing due to fatigue cracking. Such failure could result in a wing separating from the airplane with consequent loss of airplane control.

**DATES:** This AD becomes effective on June 5, 2003.

The Director of the Federal Register previously approved the incorporation by reference of Moravan Mandatory Service Bulletin Z 242L/27a–Rev. 1, dated October 31, 2000, as of March 21, 2003 (68 FR 4910, January 31, 2003).

The Director of the Federal Register approved the incorporation by reference of Moravan Mandatory Service Bulletin Z 242L/27a–Rev. 2; and Moravan Mandatory Service Bulletin Z24L/38a–Rev. 1, both dated April 15, 2003, as of June 5, 2003.

The Federal Aviation Administration (FAA) must receive any comments on this rule on or before July 7, 2003.

**ADDRESSES:** Submit comments to FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-24-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. You may view any comments at this location between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays. You may also send comments electronically to the following address: 9-ACE-7-Docket@faa.gov. Comments sent electronically must contain "Docket No. 2003-CE-24-AD" in the subject line. If you send comments electronically as attached electronic files, the files must be formatted in Microsoft Word 97 for Windows or ASCII text.

You may get the service information referenced in this AD from Moravan, Inc., 765 81 Otrokovice, Czech Republic; telephone: +420 67 767 3940; facsimile: +420 67 792 2103. You may view this information at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-24-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

#### *Has FAA Taken Any Action to This Point?*

The Civil Aviation Authority for the Czech Republic (CAA CZ) reported to FAA that Moravan Model Z-242L airplanes are operated over the load spectrum that was used at certification and are in need of a technical service life. This caused FAA to issue AD 2003-03-13, Amendment 39-13037 68 FR 4905, January 31, 2003). AD 2003-03-13 establishes a technical service life for these airplanes by restricting Acrobatic and Utility category operations and requiring replacement of the wings after a certain operational time period. The technical service life required by AD 2003-03-13 is as follows:

	<b>Acrobatic and utility category operations</b>	<b>All operations</b>
Group 1	190 hours time-in-service (TIS) only in these categories. Operation only in the Normal category thereafter.	3,500 hours TIS. New wings must be installed prior to further operation.
Group 2	450 hours TIS only in these categories. Operation only in the Normal category thereafter.	5,500 hours TIS. New wings must be installed prior to further operation.

Accomplishment of AD 2003-03-13 is required in accordance with the following:

- Mandatory Service Bulletin Z 242L/27a–Rev. 1, dated October 31, 2000: This service bulletin includes procedures for installing strengthened wings on airplanes with a serial number in the range of 0001 through 0656; and
- Mandatory Service Bulletin Z 242L/37a (Z 142C/17a), Rev. 1, and Mandatory Service Bulletin Z 242L/38a (Z 142C/18a), both dated October 31, 2000: These service bulletins include criteria for a new technical service life of the affected airplanes and specify operational limitations for Acrobatic and Utility category operations.

### *What Has Happened Since AD 2003-03-13 To Initiate This Action?*

The Civil Aviation Authority Czech Republic (CAA CZ), which is the airworthiness authority for the Czech Republic, notified FAA of the need to change AD 2003-03-13. The CAA reports that the restriction and replacement actions of AD 2003-03-13 do not completely address the unsafe condition.

The restrictions only take account for the aerobatic load spectrum and do not account for the aerobatic frequency. Although the aerobatic frequency will extend the operational times, it more importantly will ensure that all airplanes (even those that have not reached the operational limits) are not subject to fatigue cracking caused by exceeding the aerobatic frequency.

The restrictions also address the life limit of the wings when they should address the life limit of the entire airframe (life limit of the airplane). The CAA CZ reports that the AD change is necessary to:

- Address the aerobatic frequency so affected airplanes that are operated in accordance with the current restrictions do not continue to be subject to the unsafe condition because the aerobatic frequency was not accounted for;
- Life limit the entire airplane instead of just the wings; and
- Prevent structural failure of the wing due to fatigue cracking. Such failure could result in a wing separating from the airplane with consequent loss of airplane control.

### *Why Should the Affected Airplanes Be Life Limited?*

The airframe of the Moravan Model Z-242L airplanes has always been life limited. The problem is that there have been numerous changes to the Airworthiness Limitations section of the maintenance manual, which has caused confusion as to what the actual life limits are. These life limits vary between 3,500 hours time-in-service (TIS) and 5,500 hours TIS, and the affected airplanes incorporate both unstrengthened wings and strengthened wings.

In addition, the CAA CZ has accomplished fatigue testing on both the unstrengthened wings and strengthened wings using the FAA-approved load spectrum and aerobatic frequency. This testing shows that:

- The 3,500-hour TIS total airframe life limit and 190-hour TIS acrobatic and utility category restriction is necessary for airplanes with the unstrengthened wings; and
- The airplanes with strengthened wings are safe to fly up to 5,500 hours TIS total time.

The CAA CZ is continuing to test and analyze the strengthened wings. This testing and analysis could show that, with certain modifications or additional equipment, the airplanes could be operated past 5,500 hours TIS. As the CAA CZ shares this information, FAA may initiate additional rulemaking to address this matter. We will also consider alternative methods of compliance submitted in accordance with the procedures specified in the AD on a case-by-case basis.

### *Is There Service Information That Applies to This Subject?*

Moravan has issued the following revised service information:

- Mandatory Service Bulletin Z 242L/38a–Rev. 1, dated April 15, 2003; and
- Mandatory Service Bulletin Z 242L/27a–Rev. 2, dated April 15, 2003;

The service bulletin revisions incorporate updated information and specify which AFM and maintenance manual revisions apply to individual airplanes.

### *What Action Did the CAA CZ Take?*

The CAA CZ classified these service bulletins as mandatory and issued CAA-AD-T-100/2000R1, dated April 28, 2003, in order to ensure the continued airworthiness of these airplanes in the Czech Republic.

### *Was This in Accordance With the Bilateral Airworthiness Agreement?*

This airplane model is manufactured in Czech Republic and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement.

Pursuant to this bilateral airworthiness agreement, the CAA CZ has kept us informed of the situation described above.

## **The FAA's Determination and an Explanation of the Provisions of This AD**

### *What Has FAA Decided?*

The FAA has examined the findings of Czech Republic; reviewed all available information, including the service information referenced above; and determined that:

- The unsafe condition referenced in this document exists or could develop on type design Moravan Model Z 242L airplanes that are registered for operation in the United States;
- The actions specified in the previously-referenced service information (as specified in this AD) should be accomplished on the affected airplanes; and
- AD action should be taken in order to correct this unsafe condition.

### *What Does This AD Require?*

This action supersedes AD 2003-03-13 with a new AD that requires an adjustment to the operational limitations based on the aerobatic frequency and changes the life limit to the entire airplane instead of just the wings. The operational limitations adjustment consists of incorporating information into the Limitations Section of the Airplane Flight Manual (AFM) and the Airworthiness Limitations section of the maintenance manual.

In preparation of this rule, we contacted Moravan America, type clubs, and aircraft operators to obtain technical information and information on operational and economic impacts. We have included, in the rulemaking docket, a discussion of information that may have influenced this action. This includes notes from the meeting between FAA and Moravan America.

### *How Does the Revision to 14 CFR Part 39 Affect This AD?*

On July 10, 2002, FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

### *Will I Have the Opportunity To Comment Prior to the Issuance of the Rule?*

Because the unsafe condition described in this document could result in a wing separating from the airplane with consequent loss of control of the airplane, we find that notice and opportunity for public prior comment are impracticable. Therefore, good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

#### *How Do I Comment on This AD?*

Although this action is in the form of a final rule and was not preceded by notice and opportunity for public comment, FAA invites your comments on the rule. You may submit whatever written data, views, or arguments you choose. You need to include the rule's docket number and submit your comments to the address specified under the caption ADDRESSES. We will consider all comments received on or before the closing date specified above. We may amend this rule in light of comments received. Factual information that supports your ideas and suggestions is extremely helpful in evaluating the effectiveness of this AD action and determining whether we need to take additional rulemaking action.

#### *Are There Any Specific Portions of This AD I Should Pay Attention to?*

We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. You may view all comments we receive before and after the closing date of the rule in the Rules Docket. We will file a report in the Rules Docket that summarizes each FAA contact with the public that concerns the substantive parts of this AD.

#### *How Can I Be Sure FAA Receives My Comment?*

If you want us to acknowledge the receipt of your comments, you must include a self-addressed, stamped postcard. On the postcard, write "Comments to Docket No. 2003-CE-24-AD." We will date stamp and mail the postcard back to you.

### **Regulatory Impact**

#### *Does This AD Impact Various Entities?*

These regulations will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, FAA has determined that this final rule does not have federalism implications under Executive Order 13132.

#### *Does This AD Involve a Significant Rule or Regulatory Action?*

We have determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a significant regulatory action under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory

Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket (otherwise, an evaluation is not required). A copy of it, if filed, may be obtained from the Rules Docket. 4

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. FAA amends § 39.13 by removing Airworthiness Directive (AD) 2003-03-13, Amendment 39-13037 (68 FR 4905, January 31, 2003), and by adding a new AD to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2003-11-12 MORAVAN A.S.:** Amendment 39-13171; Docket No. 2003-CE-24-AD; Supersedes AD 2003-03-13, Amendment 39-13037.

(a) What airplanes are affected by this AD? This AD affects Model Z-242L airplanes, all serial numbers, that are certificated in any category.

(b) *Who must comply with this AD?* Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) *What problem does this AD address?* The actions specified by this AD are intended to prevent structural failure of the wing due to fatigue cracking. Such failure could result in a wing separating from the airplane with consequent loss of airplane control.

(d) *What actions must I accomplish to address this problem?* To address this problem, you must establish a technical service life and restrict Acrobatic and Utility category operations. This must be done by accomplishing the following, as applicable:

Actions	Compliance	Procedures
(1) <i>For all affected airplanes:</i> You must annotate Acrobatic and Utility category operational time in the logbook. If the airplane is utilized in either of these categories at any time during a flight, you must annotate the total time for that flight in the Utility or Acrobatic category, as appropriate.	As of March 21, 2003 (the effective date of AD 2003-03-13).	This is specified in Moravan Mandatory Service Bulletin Z 242L/37a (Z 142C/17a), Rev. 1, dated October 31, 2000; and Moravan Mandatory Service Bulletin Z 242L/38a (Z142C/18a)—Rev. 1, April 15, 2003. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may annotate the logbook.

<p>(2) <i>If you have an airplane with a serial number in the range of 0001 through 0656 that does not have strengthened wings installed (both left and right wings) in accordance with Moravan Mandatory Service Bulletin Z 242L/ 27a—Rev 2, dated April 15, 2003, or Rev. 1, dated October 31, 2000, accomplish the following:</i></p> <p>(i) Incorporate aerobatic frequency information into the Limitations Section of the Airplane Flight Manual (AFM); and</p> <p>(ii) Establish the airplane life limit to 3,500 hours TIS by incorporating the applicable information into the Airworthiness Limitations section of the maintenance manual.</p>	<p>On or before June 15, 2003 (10 days after the effective date of this AD).</p>	<p>As specified in Moravan Mandatory Service Bulletin Z 242L/38a—Rev. 1, dated April 15, 2003. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 Federal Aviation Regulations (14 CFR 43.7) may accomplish the Limitation Section incorporation requirement of this AD. Make an entry into the aircraft records showing compliance with these portions of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).</p>
<p>(3) <i>If you have an airplane with a serial number in the range of 0001 through 0656 that does not have strengthened wings installed (both left and right wings) in accordance with Moravan Mandatory Service Bulletin Z 242L/ 27a—Rev. 2, dated April 15, 2003, or Rev. 1, dated October 31, 2000, accomplish the following:</i></p> <p>(i) Insert the following information into the Limitations Section of the Airplane Flight Manual (AFM): “Do not operate in the Acrobatic or Utility category. Operate in the Normal category only.”</p> <p>(ii) Replace both wings with the following part numbers: (A) L 242.2100 left-hand wing; and (B) L 242.2200 right-hand wing.</p>	<p><i>AFM incorporation:</i> Upon the accumulation of 190 hours time-in-service (TIS) in the Acrobatic category and/or Utility category or on or before June 10, 2003 (90 days after the effective date of AD 2003–03–13), whichever occurs later; and <i>Replacement:</i> Upon the accumulation of 3,500 hours TIS in all operations or within the next 50 hours TIS in all operations after March 21, 2003 (the effective date of AD 2003–03–13), whichever occurs later. This replacement will allow you to operate the airplane for a total of 5,500 hours TIS. The time accumulated with unstrengthened wings installed counts toward this 5,500 hours TIS.</p>	<p><i>AFM incorporation:</i> The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may accomplish this AFM insertion of this AD. Make an entry into the aircraft records showing compliance with these portions of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9). This operational restriction is referenced in Moravan Mandatory Service Bulletin Z 242L/37a (Z 142C/17a), Rev. 1, dated October 31, 2000. <i>Replacement:</i> In accordance with Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 2, dated April 15, 2003, or Rev. 1, dated October 31, 2000.</p>



<p>(4) <i>If you have an airplane with a serial number of 0657 or higher or one in the range of 0001 through 0656 that has strengthened wings (both left and right) installed in accordance with Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 1, dated October 31, 2000, or Rev. 2, dated April 15, 2003, accomplish the following:</i></p> <p>(i) Incorporate aerobatic frequency information into the Limitations Section of the Airplane Flight Manual (AFM); and</p> <p>(ii) Establish the airplane life limit to 5,500 hours TIS and establish by incorporating the applicable information into the Airworthiness Limitations section of the maintenance manual.</p>	<p>On or before June 15, 2003 (10 days after the effective date of this AD).</p>	<p>As specified in Moravan Mandatory Service Bulletin Z 242L/38a—Rev. 1, dated April 15, 2003. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may accomplish the AFM and maintenance manual incorporation requirement of this AD. Make an entry into the aircraft records showing compliance with these portions of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).</p>
<p>(5) <i>For all affected airplanes: only install a wing with a part number of L242.2100 left-hand wing or L 242.2200 right-hand wing. The airplane is still life limited to a total of 5,500 hours TIS.</i></p>	<p>As of March 21, 2003 (the effective date of AD 2003–03–13).</p>	<p>Not Applicable.</p>

(e) *Can I comply with this AD in any other way?*

(1) To use an alternative method of compliance or adjust the compliance time, follow the procedures in 14 CFR 39.19. Send these requests to the Manager, Standards Office, Small Airplane Directorate. For information on any already approved alternative methods of compliance, contact Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

(2) Alternative methods of compliance approved in accordance with AD 2003-03-13, which is superseded by this AD, are not approved as alternative methods of compliance with this AD.

(f) *Are any service bulletins incorporated into this AD by reference?*

(1) Actions required by this AD must be done in accordance with Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 2, dated April 15, 2003, or Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 1, dated October 31, 2000; and Moravan Mandatory Service Bulletin Z 242L/38a—Rev. 1, dated April 15, 2003.

(i) The Director of the Federal Register previously approved the incorporation by reference of Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 1, dated October 31, 2000, under 5 U.S.C. 552(a) and 1 CFR part 51 as of March 21, 2003 (68 FR 4910, January 31, 2003).

(ii) The Director of the Federal Register approved the incorporation by reference of Moravan Mandatory Service Bulletin Z 242L/27a—Rev. 2; and Moravan Mandatory Service Bulletin Z 242L/38a—Rev. 1, both dated April 15, 2003, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You may get copies from Moravan, Inc., 765 81 Otrokovice, Czech Republic; telephone: +420 67 767 3940; facsimile: +420 67 792 2103. You may view copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) *Does this AD action affect any existing AD actions?* This amendment supersedes AD 2003-03-13, Amendment 39-13037.

(h) *When does this amendment become effective?* This amendment becomes effective on June 5, 2003.

**Note:** The subject of this AD is addressed in CAA-AD-T-100/2000R1, dated April 28, 2003.

Issued in Kansas City, Missouri, on May 22, 2003.  
Michael Gallagher,  
Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 03-13384 Filed 5-30-03; 8:45 am]  
BILLING CODE 4910-13-P